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REMARKS

Claims 1-12 were originally presented in the subject application, and claims 13-18 added during prosecution. Claim 1 has hereinabove been amended, to more particularly point out and distinctly claim the subject invention. No claims have herein been canceled or added. Therefore, claims 1-18 remain in this case.

The addition of new matter has been scrupulously avoided.

The Office Action, at numbered section 7 on page 7, requested an explanation as to the prior dependency of claim 9. The Examiner is correct, claim 9 should have been shown as dependent on claim 1 (not claim 4), but is now independent.

Applicants respectfully request reconsideration and withdrawal of the various grounds of rejection.

35 U.S.C. §101 Rejection

The Office Action rejected claims 1-6 under 35 U.S.C. §101, as allegedly being directed to non-statutory subject matter.

In response, Applicants have amended claim 1 to recite a computer-implemented method. As amended, Applicants submit claim 1 overcomes the stated rejection.

35 U.S.C. §102 Rejection

The Office Action rejected claims 1-18 under 35 U.S.C. §102(e), as allegedly anticipated by Wilkinson (U.S. Patent Application Publication No. 20030023954). Applicants respectfully, but most strenuously, traverse this rejection.

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As an initial matter, Applicants wish to point out that the cited published application is a continuation of U.S. Patent No. 6,308,317. Thus, they share the exact same disclosure. Applicants have already argued several times against the Wilkinson patent, the rejection over which was withdrawn earlier in prosecution.

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In this instance, Wilkinson fails to disclose at least one element of each of the independent claims and as a result does not anticipate, or even render obvious, applicants' invention.

Wilkinson generally discloses a system where a Java application is created at a work station, then downloaded to a connected smart card. The application then executes on a card Java virtual machine on the smart card supporting only a subset of codes. Data for processing and commands can be sent from the work station to the smart card, and results of processing an application stored on the card by the card JVM can be sent from the smart card to the work station. In contrast, the present invention discloses, for example, assembling an application on the card, and accessing a full VM by the card (via the limited VM) in order for the card to execute additional instructions not supported by the limited VM.

More specifically, amended claim 1 recites a computer-implemented method for providing a set of software components for component-oriented software development. The method comprises providing a set of software components out of which a software application to be executed by an apparatus comprising processor means and memory means can be partly or entirely assembled. The software components are self-contained, reusable software units that can be visually composed into applets or applications using visual application builder tools. The method further comprises assigning a different numeric identifier to each component of the set of software components, and storing each assigned numeric identifier in the corresponding component.

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Against the providing aspect of claim 1, the Office Action cites to Wilkinson at numbered paragraph 0020. However, the cited section merely discloses that new applications from different sources may be downloaded to a smart card without compromising security. Applicants submit there is no disclosure, teaching or suggestion of the claimed components, out of which a software application to be executed can be partly or entirely assembled. Instead, the cited section of Wilkinson merely discloses already created applications.

Against the wherein clause of claim 1, the Office Action cites to Wilkinson at numbered paragraph 0073:

The integrated circuit card 10 contains a card Java virtual machine (Card JVM) 16, which is used to interpret applications which are contained on card 10.

Again, however, Applicants submit the cited section says nothing regarding software components, only finished applications.

Against the assigning aspect of claim 1, the Office Action cites to Wilkinson at numbered paragraph 0022. However, Applicants submit there is no discussion in Wilkinson of Applicants' claimed feature of assigning a different numeric identifier to each component of the set of software components. Wilkinson does describe ID numbers at numbered paragraph 0078. However, this section describes ID numbers associated with string patterns (not components) in an aggregate class constant pool. This association with strings is clear at numbered paragraph 0078, which states, "This compaction is achieved by mapping all the strings found in the class file constant pool into integers... These integers are referred to as IDs." Since an ID number in Wilkinson is associated with a pattern instead of a component, applicants respectfully submit that this ID number does not teach or suggest assigning a different numeric identifier to each component of the set of software components, as recited in the claims.

Finally, against the storing aspect of claim 1, the Office Action also cites to Wilkinson at numbered paragraph 0022. However, the cited section of Wilkinson et al. fails to disclose storing each assigned numeric identifier in the corresponding component. In contrast, the strings in the Java class file constant pool are replaced with the integers/IDs. See Wilkinson et al. at

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numbered paragraph 0078. The integers/IDs are not stored in the elements represented by the strings.

Therefore, Applicants submit that claim 1 cannot be anticipated by Wilkinson.

The comments made above with respect to claim 1 are equally applicable to claims 7 and 9, and the comments regarding the providing aspect of claim 1 are applicable to claim 11. Therefore, claims 7, 9 and 11 also cannot be anticipated by Wilkinson.

Applicants further submit that the dependent claims not specifically addressed herein are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

For example, claim 5 recites providing the apparatus of claim 1 with a full virtual machine being able to execute every instruction for a predetermined object-oriented programming language.

Against claim 5, the Office Action cites to Wilkinson at numbered paragraph 0038. The cited paragraph includes the disclosure that “[a] processor uses an interpreter to interpret the first application for execution.” However, Applicants submit there is no disclosure regarding what instructions are contained in the first application, let alone *every* instruction in the programming language being used.

Therefore, Applicants submit that claim 5 cannot be anticipated by Wilkinson.

As another example, claims 14 and 15 each recite that the set of software components is at least one of, subsequent to being partly or entirely assembled into the software application, updated by updating at least one software component of the set of software components and supplemented by adding at least one software component to the set of software components.

Against claims 14 and 15, the Office Action cites to Wilkinson at numbered paragraph 0078. However, the cited section discloses coalescing several Java class files forming an application into a single card class file. This is done on the work station, then the complete Java

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application is transferred to the smart card. See Wilkinson at, for example, numbered paragraph 0092. Applicants submit there is no disclosure, teaching or suggestion of updating a software component, nor adding a software component, merely creating it on the work station and downloading it to a connected smart card.

Therefore, Applicants submit that neither claim 14 or 15 cannot be anticipated by Wilkinson.

As still a further example, claim 16 recites, in part, accessing, by the apparatus with a limited Virtual Machine, a full Virtual Machine for the predetermined object-oriented programming language residing at a computing unit coupled to the apparatus, the accessing allowing the apparatus to execute additional instructions of the predetermined object-oriented programming language.

Against the accessing aspect of claim 16, the Office Action again cites to Wilkinson at numbered paragraph 0078. However, as noted above, the cited section discloses coalescing several Java class files forming an application into a single card class file. Applicants submit there is no disclosure, teaching or suggestion of accessing a full Java virtual machine by the apparatus with a limited Java virtual machine, the full JVM residing on a computing unit coupled to the apparatus. Only the steps involved in coalescing the Java class files into one are disclosed, and these steps are performed on the work station.

Therefore, Applicants submit that claim 16 cannot be anticipated by Wilkinson.

CONCLUSION

Applicants submit that the dependent claims not specifically addressed herein are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

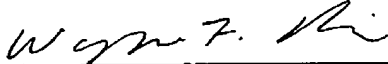
For all the above reasons, Applicants maintain that the claims of the subject application define patentable subject matter and earnestly request allowance of claims 1-18.

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If a telephone conference would be of assistance in advancing prosecution of the subject application, Applicants' undersigned attorney invites the Examiner to telephone him at the number provided.

Respectfully submitted,



Wayne F. Reinke
Attorney for Applicants
Registration No.: 36,650

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HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 Columbia Circle
Albany, New York 12203-5160
Telephone: (518) 452-5600
Facsimile: (518) 452-5579